

# RECEIVE

ENVIRONMENTAL PLANNING DIVISION

### STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

July 29, 2004

Mr. Wesley Sprague Senior Environmental Planner King County Wastewater Treatment Division 201 S. Jackson St., MS KSC-NR-0505 Seattle, WA 98104-3855

RE: Carnation Wastewater Treatment Facility Draft Environmental Impact Statement

Dear Mr. Sprague:

The Water Quality Section of the Northwest Regional Office thanks you for the opportunity to comment on the Draft Environmental Impact Statement for the proposed Carnation Wastewater Treatment Facility. We commend King County and Carnation's efforts to protect water quality in Carnation and the surrounding Snoqualmie River area.

We would like you to be aware that we have not received the final copy of the general sewer plan (2004 Comprehensive Plan) from Carnation. Although we have reviewed a draft copy, the final sewer plan approval is delayed pending King County approval and subsequent Carnation Council approval of the final version. The population, wastewater flow projections, and other design issues contained in that document would need to be consistent with what King county is proposing for capacity at the wastewater treatment facility. WAC 173-240-050 (2) requires that general sewer plans be sufficiently complete so that engineering reports can be developed from it without substantial alterations of concept and basic considerations. Substantial changes made to the sewer plan version we have reviewed could potentially require an amendment to the EIS. We do not anticipate changes, but you need to be aware of the potential risk.

WAC 173-240-060 (1) requires that the engineering report for a domestic wastewater facility include each appropriate (as determined by the department) item required in WAC 173-240-050 for general sewer plans unless an up-to-date general sewer plan is on file with the department. Since we have not received or reviewed the wastewater treatment Facilities Plan upon which the EIS is based, there is a risk that review of the Facility Plan would require changes to the Facility Plan. King County needs to be aware that substantial changes to the Facilities Plan could require an amendment to the EIS.

S1-1

S1-2

## **State Agencies**

### Washington State Department of Ecology (S1)

### **Response to Comment S1-1**

King County does not expect changes in projected wastewater flows or project design that would cause impacts beyond the range of impacts described in the Draft and Final EIS. If there are changes in Carnation's sewer plan that cause changes in the treatment plant design, King County will assess those design changes to determine if additional environmental review of the Carnation wastewater treatment facility is necessary.

### **Response to Comment S1-2**

King County will evaluate any changes to the facility plan to determine whether they involve environmental impacts that are beyond the range of those discussed in the Final EIS. If they are, the County will conduct additional environmental review as appropriate.

Mr. Wesley Sprague July 29, 2004

We have a limited number of other comments I would like to pass on to you:

- Section 3.1.1.1 Page 3-12. Has natural gas or LP gas been considered as a source
  of fuel for standby power generation? The proximity to the river and the
  potential for spill and leakage of diesel fuel makes selection of diesel fuel more
  problematic than natural or LP gas.
- Section 3.1.1.1, Page 3-4: The transport of solids to the proposed Brightwater treatment plant for disposal has the potential to provide a lesser cost since it is 10 miles shorter than Renton. The EIS may want to address treatment at either location in the interest of flexibility.
- Section 1.9.3, third paragraph; please note that wetland discharges ultimately flowing to the waters of the state require a NPDES permit.

Thank you again for the opportunity to comment. If you have any questions please call me at (425) 649-7164, or e-mail me at KZIE461@ecy.wa.gov.

Sincerely,

Kenneth D. Ziebart, P.E.

Department of Ecology, Northwest Regional Office

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Water Quality Program

cc: John Komorita, King County

October 2004

### **Response to Comment S1-3**

Natural gas and propane engines provide less energy for the size of the unit and the engine block for a natural gas or propane unit will typically be twice the size and cost of a diesel unit providing the equivalent electrical power. For the diesel engine generator unit, King County would propose to have a self-contained steel tank mounted above grade, with the engine generator unit mounted on this tank. This configuration would minimize the possibility of leakage from buried fuel lines and have a lower capital cost than a natural gas or propane unit. Please also see the response to comment O1-14 for a discussion of measures to prevent and contain any fuel leaks or spills.

### **Response to Comment S1-4**

Although King County currently plans to send solids produced by the Carnation Wastewater Treatment Facility to the South Treatment Plant, sending them to the Brightwater treatment plant will also be considered. The Brightwater treatment plant is scheduled to begin operation in 2010. In addition to hauling distance, the types of receiving facilities available for the solids must be taken into account. For example, the South Plant's septage receiving station or Dissolved Air Flotation Tanks could be used. Alternatively, the solids could be delivered to the Brightwater thickening process.

### **Response to Comment S1-5**

The second sentence in the second paragraph of this section states that the wetland discharge alternative would require an NPDES permit.



DOUG SUTHERLAND Commissioner of Public Lands

August 20, 2004

Mr. Wesley Sprague King County Wastewater Treatment Division 201 South Jackson St, Suite 505 Seattle, WA 98104

SUBJECT: Comments on DEIS for the Carnation Wastewater Treatment Facility

Dear Mr. Sprague:

Thank you for giving the Washington State Department of Natural Resources (WADNR) the opportunity to comment on your DEIS for the Carnation Wastewater Treatment Facility. As proprietary manager of state-owned aquatic lands WADNR is charged with four main tasks related to those lands – encouraging public use and access; fostering water-dependent uses; ensuring environmental protection; and utilizing renewable resources (Revised Code of Washington RCW 79.90.455).

- S2-1

  The WADNR commends you on your effort to propose innovative alternatives and drive to use the highest technologies available. We support the tertiary level of treatment that the new plant is proposing to utilize. The use of membrane bioreactor technology will help eliminate bacteria, viruses, and nutrients from the effluent, which could reside in the sediment and negatively impact the natural water systems, which it is discharged into.
- In following the tasks that WADNR has been charged with, we are working to ensure environmental protection by trying to reduce our reliance on the state waters as a disposal site for effluent. We support and promote the progress of Wastewater Facilities to implement alternative disposal methods or find ways for water re-use. WADNR preferred alternative is upland disposal, which includes water re-use and land application options. Moreover, wetland discharge is an alternative that WADNR supports. Only when these other options are technically or economically unfeasible do we support discharge into the river.
- S2-3 WADNR encourages Wastewater Facilities to pursue efforts to reduce the waste load and volume of effluent. A water conservation and pollution prevention program will help educate the public about water consumption and reduce the amount of wastewater influent.
- The Snoqualmie River outfall alternative is located on state-owned aquatic lands (SOAL). If the river discharge alternative is chosen, King County will need to apply for an aquatic lands easement with the WADNR. Please contact the WADNR, if this option is chosen, so we can begin the application process.

SOUTH PUGET SOUND REGION ■ 950 FARMAN AVE N ■ ENUMCLAW, WA 98022-9282

\*\*TEL: (360) 825-1631 ■ FAX: (360) 825-1672 ■ TTY: (360) 825-6381

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### Washington State Department of Natural Resources (S2)

### **Response to Comment S2-1**

Thank you for your comment.

### **Response to Comment S2-2**

The Draft EIS evaluates and compares the potential environmental impacts of the three discharge alternatives. These impacts will be weighed by decision-makers along with technical, economic and other factors in choosing a discharge alternative.

### **Response to Comment S2-3**

The City of Carnation's plans for water conservation are discussed in Chapter 1, Section 1.9.5 (new section). King County has pollution prevention programs in place that are designed to keep hazardous materials out of the wastewater system. These programs will be extended to Carnation when the treatment facility goes into operation.

### **Response to Comment S2-4**

If the river discharge alternative is chosen, King County will contact and work closely with WADNR to meet all applicable requirements.

S2-5

If the outfall alternative is chosen, it should be constructed and designed to minimize impacts to the river system. First, consider using a strong and durable material for the pipeline, such as HDPE. This material will increase the life expectancy of the outfall. Secondly, consider minimizing or eliminating the use of riprap as a bank stabilizer. The proposed outfall location has a low riverbank; therefore, a more natural alternative for bank stabilization may be feasible. Additionally, the construction of the outfall should minimize any benthic impacts. There are other options to trenching, such as drilling. If this alternative is feasible it could cause the least impact to the river system. Finally, please note that any mitigation or restoration proposed on SOAL must be approved by the WADNR and a use authorization must be granted.

Thank you for considering the Washington State Department of Natural Resources comments.

Sincerely,

Monica Durk w

Monica Durkin Land Manager

### **Response to Comment S2-5**

If the river discharge alternative is chosen, King County will work with WADNR during design to develop an outfall design that meets WADNR's requirements.

Department of Natural Resources and Parks Water and Land Resources Agriculture Program

### **Carnation Wastewater Treatment Facility DEIS**

July 26, 2004

King County Agriculture Program comments:

The DEIS does not indicate that both the proposed River Discharge and Wetland Discharge sites are within the Snoqualmie River Valley Agricultural Production District (APD), a designated resource area containing agricultural lands of long-term commercial significance. The following comments are intended to ensure that there is minimal impact to agriculture if either site is selected as the discharge site.

#### Conveyance Pipeline:

Pipeline location: Portions of the pipeline that will be located on private property should be sited so that there is minimal impact to farming operations. For example, from an agricultural perspective it is usually preferable to locate pipeline easements along property boundaries rather than across the middle of a property. Another acceptable alternative is to locate the pipeline under an existing field road so that its installation does not disturb agricultural soils or take any additional property out of agricultural production.

Pipeline installation: Burying the pipeline at a depth ranging from 3 – 8 feet is acceptable to the Agriculture Program as this depth is sufficient to allow it to be farmed over. We recommend a minimal depth of at least 3 feet as a shallowly buried pipeline could interfere with tillage operations.

#### Wetland Discharge:

Portions of this proposed discharge site have recently been used for agriculture and because it is within the designated APD, the County has an obligation to maintain suitability for agricultural use on as much of the property as possible. The Agriculture Program concurs with the DEIS in that the areas having the lowest elevation should be selected as the discharge areas where wetlands will be created and/or enhanced. The DEIS states that because of soil composition, little contact is anticipated between the ground water and the surface and subsurface water in the wetland discharge site. However, we are concerned about lateral movement of the discharged water and the possibility that it may cause the water table in adjoining farmable areas to rise and result in their becoming too wet to farm. To reduce the likelihood of this occurring, we recommend that the design for this discharge site include sufficient excavation or other design feature, so that when discharge occurs, the elevation of the water table.

Thank you for the opportunity to comment on the DEIS.

L1-3

11-1

L1-4